

What is claimed is:

1. Roof component assemblies for use in a self-adhered roof system, comprising:

a base sheet assembly; the base sheet assembly consisting essentially of a waterproof self-adhering base sheet for forming a watertight roof system layer and adhering to an overlying and an underlying roof system layer, a bottom surface release sheet forming a bottom surface of the base sheet assembly, and a top surface release sheet forming a top surface of the base sheet assembly; the waterproof self-adhering base sheet having a length, a width and a thickness; the waterproof self-adhering base sheet having a bottom major surface and a top major surface defined by the length and the width of the waterproof self-adhering base sheet; the waterproof self-adhering base sheet consisting essentially of a reinforcing layer encapsulated within a self-adhering bitumen that forms the bottom major surface and the top major surface of the waterproof self-adhering base sheet; the bottom surface release sheet overlying and being substantially coextensive with the bottom major surface of the waterproof self-adhering base sheet to protect the bottom major surface of the waterproof self-adhering base sheet from damage during storage, shipment and handling and being removable from the bottom major surface of the waterproof self-adhering base sheet immediately prior to installation of the waterproof self-adhering base sheet on an underlying layer of a roof system; with the bottom surface release sheet removed from the bottom major surface of the waterproof self-adhering base sheet, the bottom major surface of the waterproof self-adhering base sheet being self-adhering for forming a watertight bond with an underlying roof system layer primarily by the application of pressure; the top surface release sheet overlying and being substantially coextensive with the top major surface of the waterproof self-adhering base sheet to protect the top major surface of the waterproof self-adhering base sheet from damage during storage, shipment and handling and being removable from the top major surface of the waterproof self-adhering base sheet immediately prior to an application of an overlying roof layer to the top major surface of the waterproof self-adhering base sheet; with the top surface release sheet removed from the top major surface of the waterproof self-adhering base sheet, the top major surface the waterproof self-adhering base sheet being self-adhering for forming a watertight bond with an overlying roof system layer primarily by the application of pressure.

2. The roof component assemblies for use in a self-adhered roof system according to claim 1, including:

a cap sheet assembly; the cap sheet assembly consisting essentially of a waterproof fire-retardant cap sheet for forming a watertight topmost layer of a roof system adhered to an underlying roof system layer formed by a plurality of the waterproof self-adhering base sheets, a bottom surface release sheet forming a bottom surface of the cap sheet assembly, and a top surface selvage edge portion release sheet forming one lateral edge portion of a top surface of the cap sheet assembly; the waterproof fire-retardant cap sheet having a length, a width and a thickness; the waterproof fire-retardant cap sheet having a bottom major surface and a top major surface defined by the length and the width of the waterproof fire-retardant cap sheet; the waterproof fire-retardant cap sheet consisting essentially of a reinforcing layer encapsulated within a fire-retardant modified bitumen, which forms the bottom major surface and a selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet, and a top major surface coating layer forming a remainder of the top major surface of the waterproof fire-retardant cap sheet; the bottom surface release sheet overlying and being substantially coextensive with the bottom major surface of the waterproof fire-retardant cap sheet to protect the bottom major surface of the waterproof fire-retardant cap sheet from damage during storage, shipment and handling and being removable from the bottom major surface of the waterproof fire-retardant cap sheet immediately prior to installation of the waterproof fire-retardant cap sheet on an underlying roof system layer formed by a plurality of the waterproof self-adhering base sheets to form a watertight bond with the underlying roof system layer primarily by the application of pressure; the top selvage edge portion release sheet overlying and being substantially coextensive with the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet to protect the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet from damage during storage, shipment and handling and being removable from the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet immediately prior to an application and bonding of an overlapping portion of an adjacent cap sheet to the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet to form a watertight bond with the overlapping portion of the adjacent cap sheet.

3. A method of making a self-adhered roof system, comprising:

providing a plurality of base sheet assemblies; each of the base sheet assemblies consisting essentially of a waterproof self-adhering base sheet for forming a watertight roof system layer and adhering to an underlying and an overlying roof system layer, a bottom surface release sheet forming a bottom surface of the base sheet assembly, and a top surface release sheet forming a top surface of the base sheet assembly; the waterproof self-adhering base sheet having a length, a width and a thickness; the waterproof self-adhering base sheet having a bottom major surface and a top major surface defined by the length and the width of the waterproof self-adhering base sheet; the waterproof self-adhering base sheet consisting essentially of a reinforcing layer encapsulated within a self-adhering bitumen that forms the bottom major surface and the top major surface of the waterproof self-adhering base sheet; the bottom surface release sheet overlying and being substantially coextensive with the bottom major surface of the waterproof self-adhering base sheet to protect the bottom major surface of the waterproof self-adhering base sheet from damage during storage, shipment and handling and being removable from the bottom major surface of the waterproof self-adhering base sheet immediately prior to installation of the waterproof self-adhering base sheet on an underlying roof system layer; with the bottom surface release sheet removed from the bottom major surface of the waterproof self-adhering base sheet, the bottom major surface of the waterproof self-adhering base sheet being self-adhering for forming a watertight bond with an underlying roof system layer primarily by the application of pressure; the top surface release sheet overlying and being substantially coextensive with the top major surface of the waterproof self-adhering base sheet to protect the top major surface of the waterproof self-adhering base sheet from damage during storage, shipment and handling and being removable from the top major surface of the waterproof self-adhering base sheet immediately prior to an application of an overlying roof system layer to the top major surface of the waterproof self-adhering base sheet; with the top surface release sheet removed from the top major surface of the waterproof self-adhering base sheet, the top major surface the waterproof self-adhering base sheet being self-adhering for forming a watertight bond with an overlying roof system layer primarily by the application of pressure; and

forming a watertight roof system layer with a plurality of the waterproof self-adhering base sheets by removing the bottom surface release sheets from the plurality waterproof self-adhering base sheets and pressing the waterproof self-adhering base sheets against an underlying roof system layer.

4. The method of making a self-adhered roof system according to claim 3, including:

forming a watertight bond between an overlying roof system layer and the watertight roof system layer formed of the plurality of waterproof self-adhering base sheets by removing the top surface release sheets from the plurality of waterproof self-adhering base sheets and pressing roofing components of the overlying roof system layer against the top major surfaces of the plurality of waterproof self-adhering base sheets.

5. The method of making a self-adhered roof system according to claim 4, wherein:

the roofing components of the overlying roof system layer are a plurality of waterproof fire-retardant cap sheets.

6. The method of making a self-adhered roof system according to claim 5, wherein:

the plurality of waterproof fire-retardant cap sheets are provided from a plurality of cap sheet assemblies; each of the cap sheet assemblies consisting essentially of one waterproof fire-retardant cap sheet for forming a watertight topmost roof system layer when adhered to an underlying roof system layer formed by the waterproof self-adhering base sheets, a bottom surface release sheet forming a bottom surface of the cap sheet assembly, and a top surface selvage edge portion release sheet forming one lateral edge portion of a top surface of the cap sheet assembly; the waterproof fire-retardant cap sheet having a length, a width and a thickness; the waterproof fire-retardant cap sheet having a bottom major surface and a top major surface defined by the length and the width of the waterproof fire-retardant cap sheet; the waterproof fire-retardant cap sheet consisting essentially of a reinforcing layer encapsulated within a fire-retardant modified bitumen, which forms the bottom major surface and a selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet, and a top major surface coating layer forming a

remainder of the top major surface of the waterproof fire-retardant cap sheet; the bottom surface release sheet overlying and being substantially coextensive with the bottom major surface of the waterproof fire-retardant cap sheet to protect the bottom major surface of the waterproof fire-retardant cap sheet from damage during storage, shipment and handling and being removable from the bottom major surface of the waterproof fire-retardant cap sheet immediately prior to installation of the waterproof fire-retardant cap sheet on an underlying roof system layer formed by the waterproof self-adhering base sheets to form a watertight bond with the underlying roof system layer of waterproof self-adhering base sheets primarily by the application of pressure; the top selvage edge portion release sheet overlying and being substantially coextensive with the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet to protect the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet from damage during storage, shipment and handling and being removable from the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet immediately prior to an application and bonding of an overlapping portion of an adjacent cap sheet to the selvage edge portion of the top major surface of the waterproof fire-retardant cap sheet to form a watertight bond with the overlapping portion of the adjacent cap sheet.